



Advanced Energy Group (AEG) Trucking Task Force Recap

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Advanced Energy Group (AEG)

- Stakeholder engagement platform working to accelerate climate and equity goals in Chicago, New York, Washington D.C., Boston, and the Caribbean
- Quarterly topics of Critical Infrastructure, Buildings and Construction, Grid Modernization, and Mobility and Transportation
- Leaders vote on most pressing obstacle then develop a 12-month solution
 - Volunteer Task Forces then work for 12 months to achieve goals

Last Week's AEG Chicago Stakeholder Challenge on Mobility and Transportation:

Volunteer Task Force to
launch public campaign
for fair public transit



Trucking Task Force

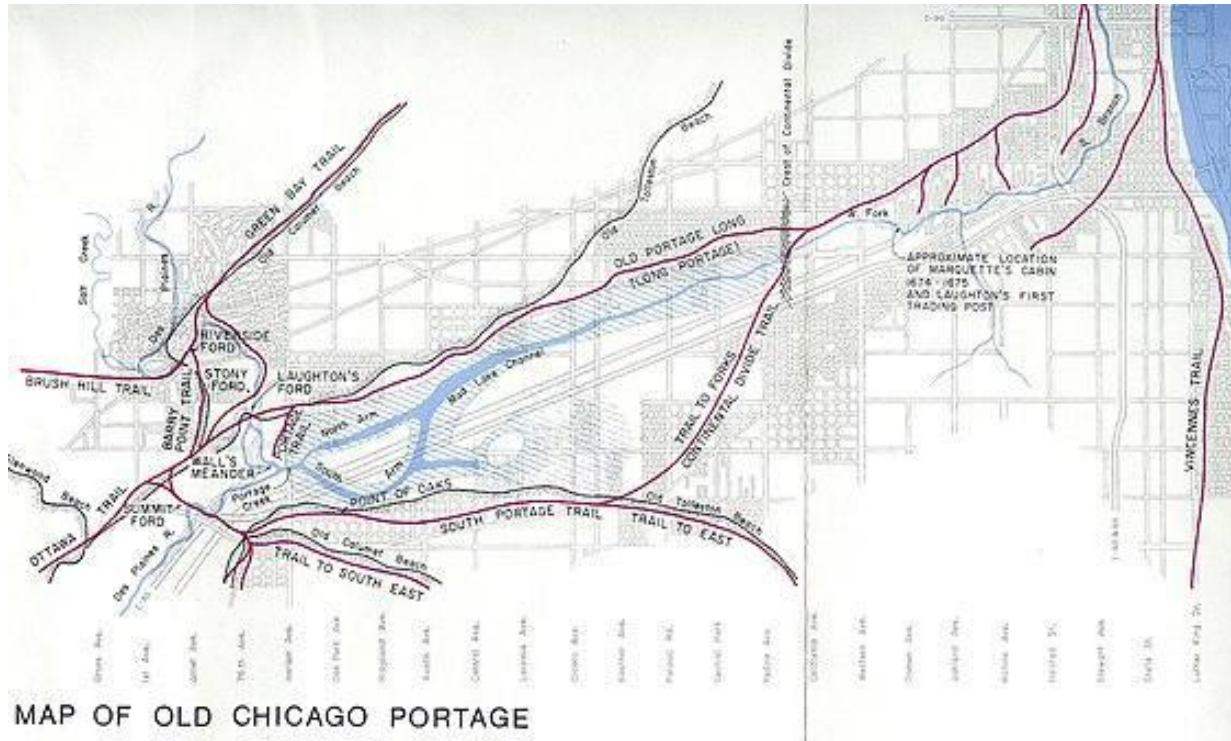
- 25+ active participants representing a wide range of stakeholders
- **Goals:** Focus on environmental justice concerns, fleet engagement, utility considerations, and funding for fleets
- **Accomplishments:**
 - Established multi-stakeholder group
 - Connecting the dots in the clean fleet world including fleets, utilities, Original Equipment Manufacturers (OEMs), environmental nonprofits, city agencies and EV solution providers
 - 1-on-1 work with fleets:
 - Martin Brower - McCook Operation
 - Ozinga mixers calculations
 - Hosted Illinois Clean Truck Fleet Forum
 - Education and fleet engagement event with over 70+ attendees



Executive Summary

- **Drayage freight in Chicago offers great opportunity for electrification**
 - Application aligns with limitations of electrification
 - Huge health/air quality benefits for communities near intermodal yards
 - Invests in local economy and small businesses
- **Fleet engagement and education may be biggest challenge**
 - Understanding specifics of trucking operations is essential, especially for policymakers
 - Fleet engagement was a big focus of AEG Trucking Task Force with limited success
- **Utility Considerations:**
 - Develop outreach plan and points of contact for smaller fleet operations
 - Prioritize investment in SW and SE sides to alleviate charging deserts and prepare for electrification, specifically for drayage
 - Long-term vision is needed to address structural issues
 - Collaborate, collaborate, collaborate!!! We need as many people in the conversation as possible

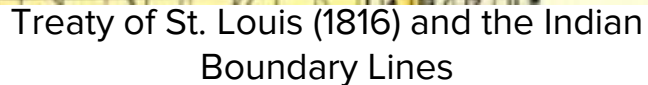
Chicago as a “Freight Hub” Historical Background



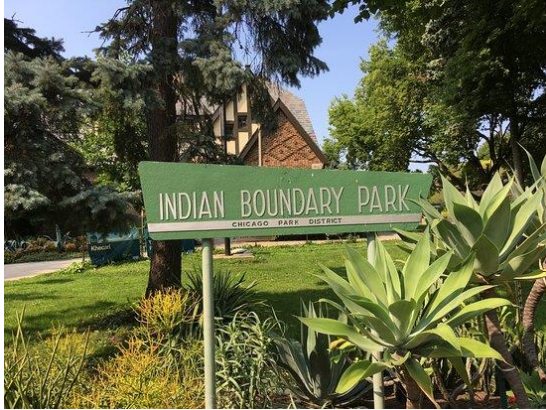
Portage: “the carrying of a boat or its cargo between two bodies of water”

“This will be the gate of empire, this the seat of commerce”

-French Explorer Robert La Salle



Native American Removal and the I&M Canal



Indian Boundary Park in
Rogers Park



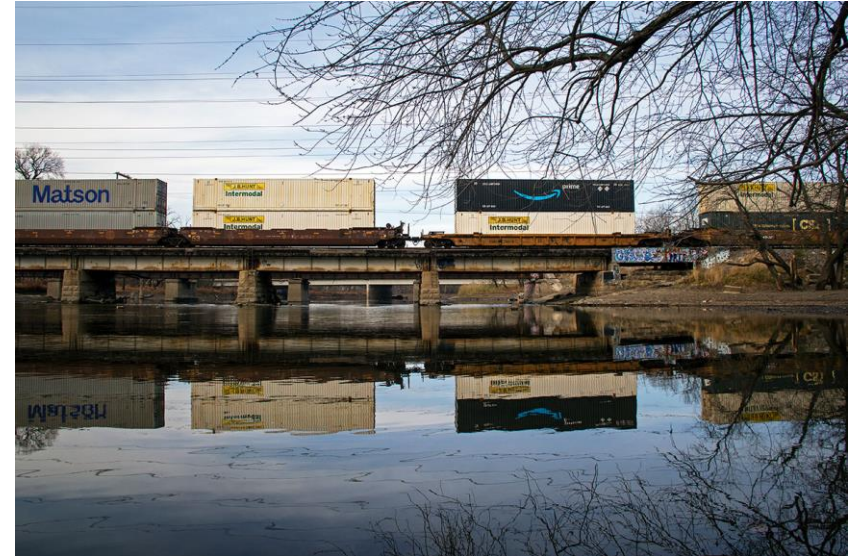
Barge on Chicago Sanitary and Ship Canal

Rail in Chicago

“Player with Railroads and the Nation's Freight Handler”

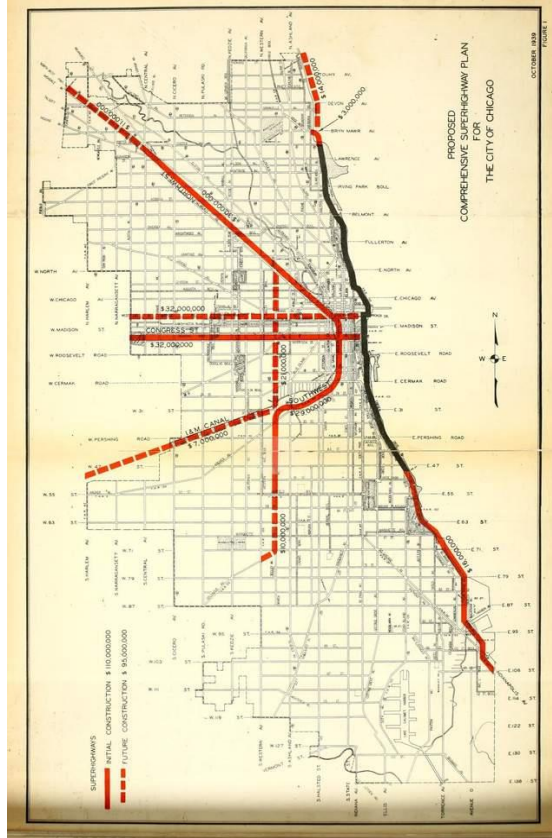
“Chicago” by Carl Sandburg (1914)

- **Metropolitan Chicago is the largest rail-truck intermodal port in the country**, moving more than 16.4 million 20-ft equivalent units of freight cargo and exporting nearly \$44 billion of manufactured goods in 2016 (CMAP)
- Intermodal activity increasing. Rose 38% from 2009 to 2016



Freight Train Near the Chicago Portage

Highways

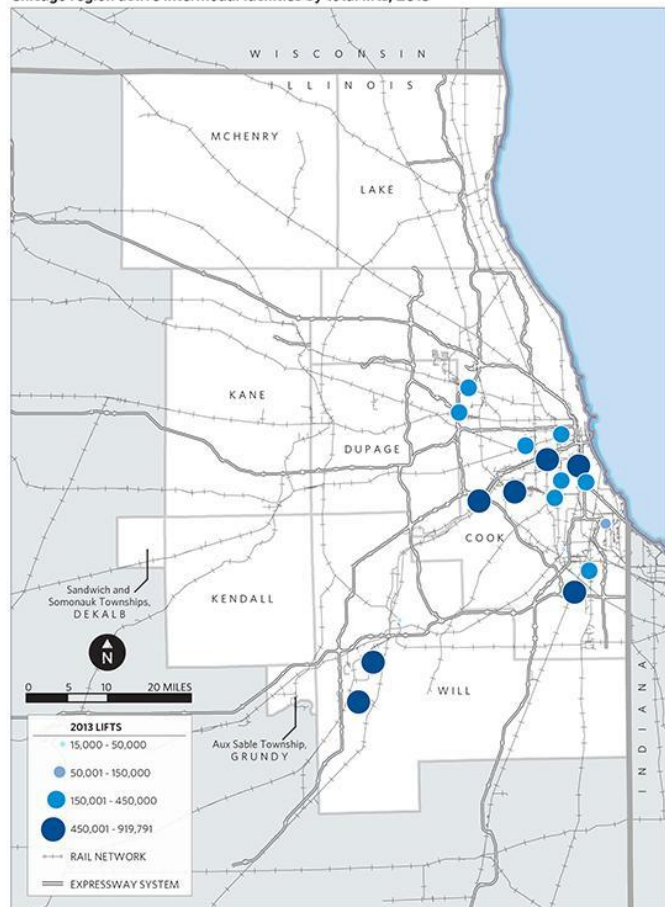


“Comprehensive Superhighway Plan” (1939)



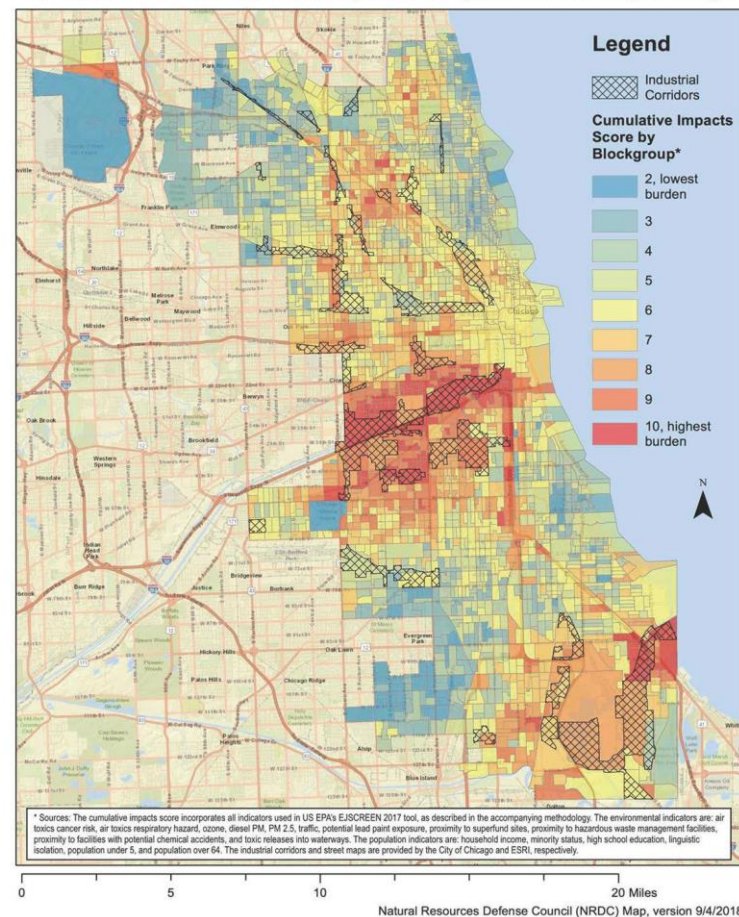
Demolition on Near West Side for
Congress Expressway (1949)

Chicago region active intermodal facilities by total lifts, 2013



Intermodals vs. Environmental Vulnerability

Cumulative Burden of Environmental Exposures & Population Vulnerability in Chicago



Notice the Pattern?

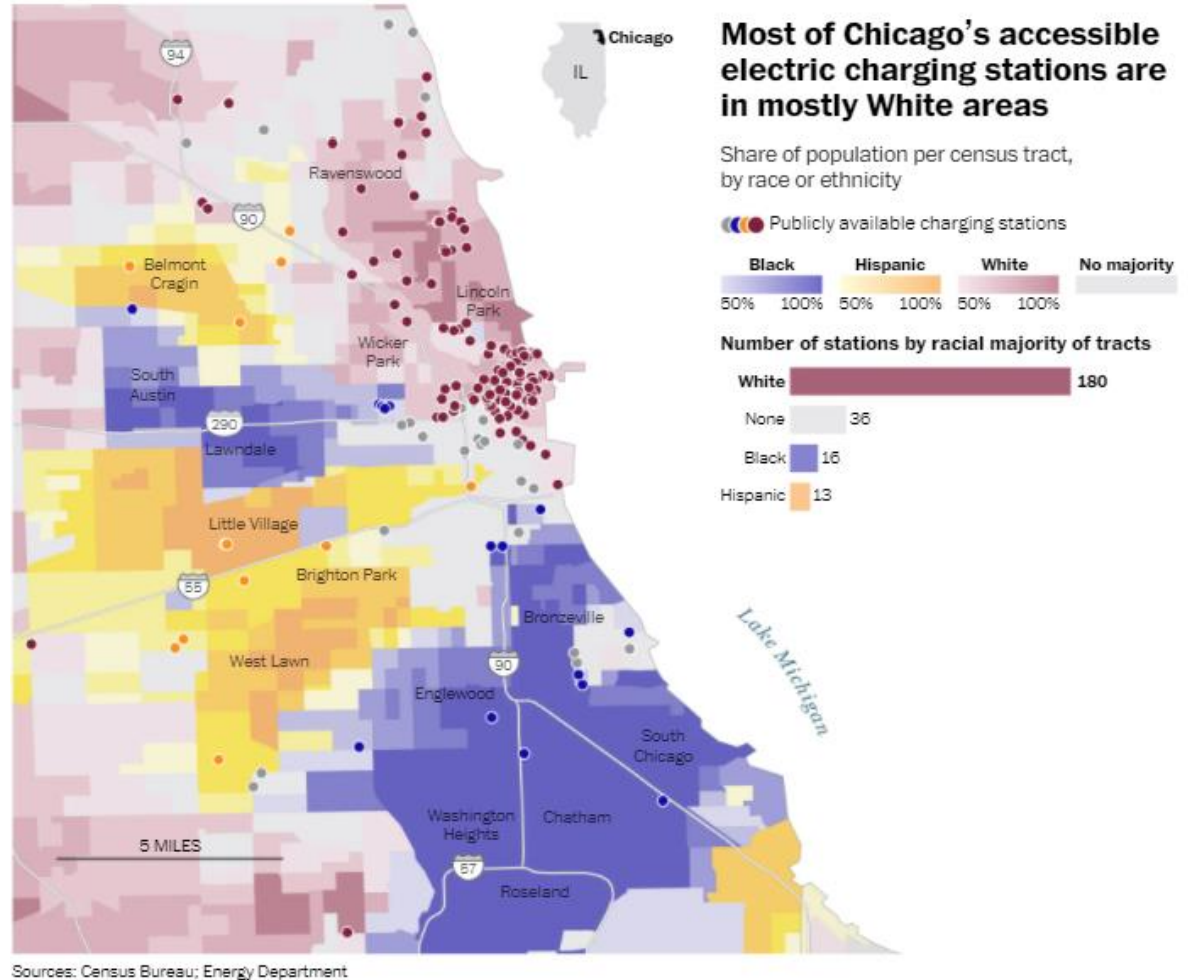
- Chicago is STILL a portage
 - Intermodal facilities require lifts and transfers, much like historic Chicago Portage
- Freight system has relied on sacrifice of marginalized communities
 - Potawatomi, Odawa, Ojibwe and other Native people for 1816 Treaty of St. Louis and I&M Canal
 - Black, Jewish, and other working-class communities for Congress Expressway (I-290), Dan Ryan (I-94), and other highways
 - Latinx and other working-class communities near intermodals for past decades

Some people have always been deemed expendable for the success of the freight system here in Chicago

This cannot continue as we move toward a more equitable system

Freight electrification can be our chance to do better

Yet in some ways,
this is already
happening with EV
infrastructure...



Source: Washington Post 12.9.21

Illinois Clean Truck Fleet Forum

- **Goal:** create a platform for public fleets, private fleets, and associated stakeholders to collectively discuss barriers and opportunities to fleet electrification in Illinois
- Culmination of AEG Trucking Task Force
- [Click here for event Resource Page including recording and notes](#)



The event banner features a central text box with the event details: "September 30th, 2021", "Illinois Clean Truck Fleet Forum Online", and "@ 9:00am - 11:00am CT". Above this box is the AEG CHICAGO logo. Below the box are two rows of speaker portraits. The top row includes Dave Schaller and Tim Milburn. The bottom row includes Samantha Bingham, Maria Bocanegra, Jillian Safian, and Liam Donnelly. At the bottom of the banner are logos for NACFE, CDOT, Lion, and Green Ways 2Go.

September 30th, 2021
Illinois Clean Truck Fleet Forum Online
@ 9:00am - 11:00am CT

DAVE SCHALLER **TIM MILBURN**

SAMANTHA BINGHAM **MARIA BOCANEGRA** **JILLIAN SAFIAN** **LIAM DONNELLY**

NACFE **CDOT** **LION** **Green Ways 2Go**

Illinois Clean Truck Fleet Forum

Takeaways:

- Electrification must focus on *application*
- Transitioning to EVs requires organizational buy-in from fleets both public and private
- Technology and incentives are rapidly evolving and difficult to keep track of
- Fleet engagement is difficult!
- [Click here for event Resource Page including recording and notes](#)



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NACFE
NORTH AMERICAN COUNCIL FOR FREIGHT EFFICIENCY

Green Ways 2Go

CDOT
Chicago Department of Transportation

ICC
ILLINOIS CLEAN ENERGY CONSORTIUM

LION

SUSTAINABLE

Opportunity: Drayage Freight in Chicago

Drayage Definition:

“Drayage refers to the process of transporting goods over short distances. It includes the trucking of containerized cargo from one port to another or from a port to a railyard.”



JB Hunt Intermodal: A common sight in Chicago

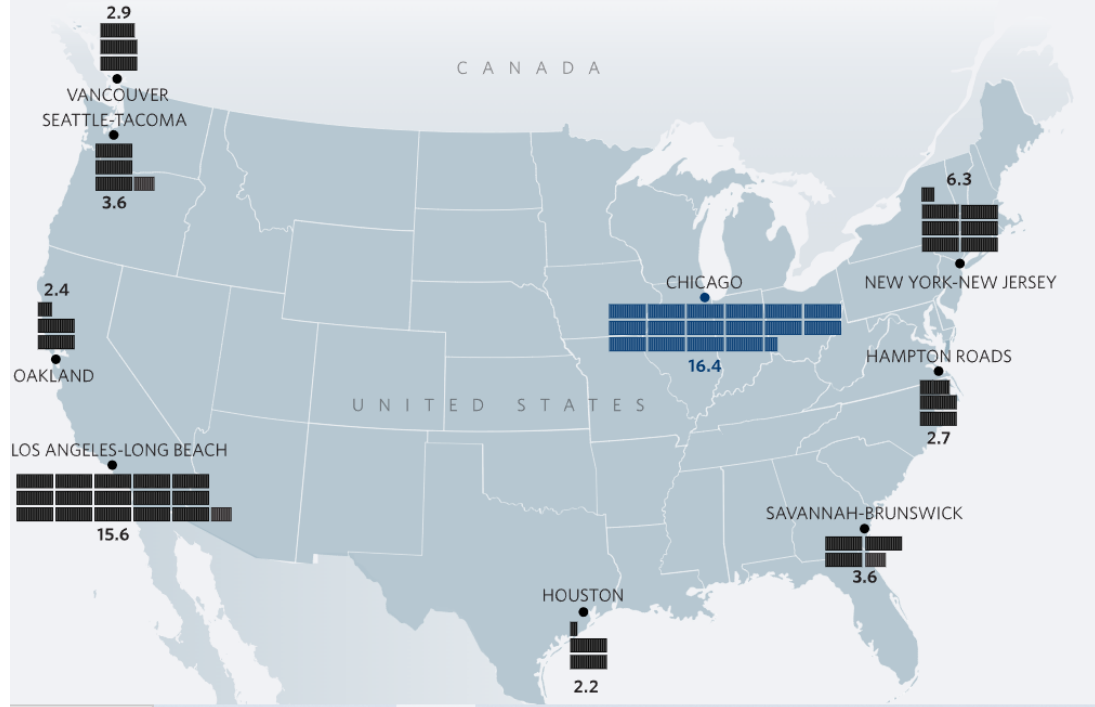


An intermodal lift

Busiest North American ports by TEUs moved, 2016, in millions

Note: Data represent total loaded and empty TEUs handled in domestic and foreign trade. TEU is a 20-foot equivalent freight cargo container.

Source: Chicago Metropolitan Agency for Planning estimates of regional intermodal activity; American Association of Port Authorities statistics.



Ports by Twenty Foot Equivalent Units (CMAP)

Opportunity: Drayage Freight in Chicago

- Drayage Freight: the glue that holds the intermodal system together
- Great opportunity based on *application*
 - Shorter routes. Trucks generally return to same depots each night
- Projected cost savings in near-term with total cost of ownership
- Drayage firms often have older trucks with worse emissions (PM 2.5 pollution far worse in older diesel engines) □ Greatest reduction in harmful air pollution
- More likely to drive through neighborhoods between intermodals

Challenge: Fleet Engagement and Education

Fleet engagement was a challenge for AEG Trucking Task Force

- Limited results despite high focus on outreach and aid of Illinois Trucking Association
- Few Fleet Managers have time in day-to-day schedule to participate
 - “Those guys go through hell every day” --Chicago Freight Logistics Analyst
- Smaller operations are hardest to reach and least likely to have funding
- Zoom/online meetings may be a challenge

Challenge: Fleet Engagement and Education

- Fleet engagement is essential for electrification
 - During Fleet Forum, participants from ComEd emphasized the need for early outreach from fleets for electrification projects
 - Adding chargers and trucks takes time and may require substation upgrades and added costs
- Better data needed on drayage freight and local deliveries
 - Drayage data in other cities has been referred to as a “black hole”
 - Fine-grained data could help us lessen traffic through neighborhoods, reduce idling and better understand specific fleet experiences

Utility Considerations for Beneficial Electrification

- Direct outreach to smaller fleets, not just large customers
 - Big opportunity to reduce air pollution from older trucks while investing in local economy
- Prioritize upgrades for SW/SE Side
 - Address charging deserts while preparing for electric drayage near freight infrastructure
- Eye on technology – Wireless charging, Logistics innovations
- Collaboration with intermodal yards, logistics companies, Port of Chicago, city agencies, unions, and local environmental advocacy groups
- Same can be done downstate with other intermodals/truck depots

**Long-term vision is essential for dealing with structural inequities.
The choices we make today will impact generations to come!**

Thank you!